



New Jersey Department of Environmental Protection
Site Remediation Program

RECEPTOR EVALUATION (RE) FORM

Date Stamp
(For Department use only)

SECTION A. SITE

Site Name: Hess Corporation Former Port Reading Complex

Program Interest (PI) Number(s): 006148

Case Tracking Number(s) for this submission: E20130449

**This form must be attached to the Cover/Certification Form
if not submitted through the RIR Online Service**

Indicate the type of submission:

☒ Initial RE Submission

☐ Updated RE Submission

Indicate the reason for submission of an updated RE form

☐ Submission of an Immediate Environmental Concern (IEC) source control report;

☐ Submission of a Remedial Investigation Report;

☐ Submission of a Remedial Action Report;

Check if included in updated RE

☐ The known concentration or extent of contamination in any medium has increased;

☐ A new AOC has been identified;

☐ A new receptor is identified;

☐ A new exposure pathway has been identified.

SECTION B. ON SITE AND SURROUNDING PROPERTY USE

1. Identify any sensitive populations/uses that are currently on-site or surrounding property usage within 200 feet of the site boundary (check all that apply):

	On-site	Off-site
None of the following	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Residences or residential property	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Public or Private Schools grades K-12	<input type="checkbox"/>	<input type="checkbox"/>
Child care centers.....	<input type="checkbox"/>	<input type="checkbox"/>
Public parks, playgrounds or other recreation areas	<input type="checkbox"/>	<input type="checkbox"/>
Other sensitive population use(s) Explain	<input type="checkbox"/>	<input type="checkbox"/>

If any of the above applies, attach a list of addresses, facility names, type of use, and a map depicting each location relative to the site.

2. Current site uses (check all that apply):

<input checked="" type="checkbox"/> Industrial	<input type="checkbox"/> Residential	<input type="checkbox"/> Commercial	<input type="checkbox"/> Agricultural
<input type="checkbox"/> School or child care	<input type="checkbox"/> Government	<input type="checkbox"/> Park or recreational use	
<input type="checkbox"/> Vacant	<input type="checkbox"/> Other: _____		

3. Planned future site uses and off-site use within 200 ft of site boundary (check all that apply):

<input checked="" type="checkbox"/> Industrial	<input checked="" type="checkbox"/> Residential	<input type="checkbox"/> Commercial	<input type="checkbox"/> Agricultural
<input type="checkbox"/> School or child care	<input type="checkbox"/> Government	<input type="checkbox"/> Park or recreational use	
<input type="checkbox"/> Vacant	<input type="checkbox"/> Other: _____		

Provide a map depicting the location of the proposed changes in land use.

SECTION C. DESCRIPTION OF CONTAMINATION

1. Identify if any of the following exist at the site (check all that apply):

☒ Free product [N.J.A.C. 7:26E-1.8] identified is ☒ LNAPL* or ☐ DNAPL**. Date identified: 10/30/1969

☒ Residual product [N.J.A.C. 7:26E-1.8]

☐ Other high concentration source materials not identified above (e.g., buried drums, containers, unsecured friable asbestos)

Explain: _____

* LNAPL – measured thickness of .01 feet or more

**DNAPL – See [US EPA DNAPL Overview](#)

2. Soil Migration Pathway

Has soil contamination been delineated to the applicable Direct Contact Soil

Remediation Standard? ☐ Yes ☒ No

Are all soils either below the applicable Direct Contact Criteria or under an institutional

control (i.e. deed notice)? ☐ Yes ☒ No

3. If this evaluation is submitted with a technical document that includes contaminant summary information, proceed to Section D. Otherwise attach a brief summary of all currently available data and information to be included in the site investigation or remedial investigation report.

SECTION D. GROUND WATER USE

1. Has the requirement for ground water sampling been triggered? ☒ Yes ☐ No ☐ Unknown
If "No," proceed to Section F. If "Unknown," explain: _____

2. Is Ground water contaminated above the Ground Water Remediation Standards [N.J.A.C.7:9C]? ☒ Yes ☐ No ☐ Unknown

Or ☐ Awaiting laboratory data with the expected due date: _____

If "Yes," provide the date that the laboratory data was available and confirmed contamination above the Ground Water Remediation Standards. Date: 01/19/2011

If "Unknown," explain: _____

If "No," or awaiting laboratory data proceed to Section F.

3. Has ground water contamination been delineated to the applicable Remediation Standard? ☐ Yes ☒ No

4. Has a well search been completed? ☒ Yes ☐ No

Date of most recent or updated well search: 09/24/2015

Identify if any of the following conditions exist based on the well search [N.J.A.C.7:26E-1.14(a)] (check all that apply):

☐ Potable wells located within 500 feet from the downgradient edge of the currently known extent of contamination.

☐ Potable well located 250 feet upgradient or 500 feet side gradient of the currently known extent of contamination.

☐ Ground water contamination is located within a Tier 1 wellhead protection area (WHPA).

5. Is a completed Well Search Spreadsheet or historical well search table attached and has an electronic copy of the spreadsheet been submitted to srpgis_wrs@dep.state.nj.us. ☒ Yes ☐ No

If "No," explain: _____

6. Are any private potable or irrigation wells located within ½ mile of the currently known extent of contamination? ☐ Yes ☒ No

If "Yes," was a door to door survey completed? ☐ Yes ☐ No

If survey was not completed explain: _____

7. Has sampling been conducted of ☐ potable well(s) and/or ☐ non-potable use well(s)? ☐ Yes ☒ No

If "No," provide justification then proceed to Section E.

Potable wells are located approximately 4,600 feet from the Property.

- 8 Has contamination been identified in potable well(s) above Ground Water Remediation Standards that is not suspected to be from the site? (If "Yes," provide justification) ☐ Yes ☐ No
-
- 9 Has contamination been identified in potable well(s) that is above the Ground Water Remediation Standards or Federal Drinking Water Standards? ☐ Yes ☐ No
- Provide date laboratory data was received: _____
- Or ☐ awaiting laboratory data with the expected due date: _____
- If "Yes" for potable well contamination **not attributable to background**, follow the IEC Guidance Document at <http://www.nj.gov/dep/srp/guidance/index.html#iec> for required actions and answer the following:
- Has an engineered system response action been completed on all receptors? ☐ Yes ☐ No
- Provide a brief narrative description:
- Date completed: _____ NJDEP Case Manager: _____
10. Were Non-potable use well(s) sampled and results were above Class II Ground Water Remediation Standards? ☐ Yes ☐ No
- Provide date laboratory data was received: _____
- Or ☐ awaiting laboratory data with the expected due date: _____
11. Has the ground water use evaluation been completed? ☒ Yes ☐ No

SECTION E. VAPOR INTRUSION (VI)

1. Contaminants present in ground water exceed the Vapor Intrusion Ground Water Screening Levels that trigger a VI evaluation. (see NJDEP Vapor Intrusion Technical Guidance). ... ☒ Yes ☐ No ☐ Unknown
- Or ☐ Awaiting laboratory data and the expected due date: _____
- Provide the date that the laboratory data was available and confirmed contamination above the Vapor Intrusion Trigger Levels. Date: 09/08/2010
2. Other existing conditions that trigger a VI evaluation. (see NJDEP Vapor Intrusion Technical Guidance)
- ☐ Wet basement or sump containing free product or ground water containing volatile organics
 - ☐ Methane generating conditions causing oxygen deficient or explosion concern
 - ☐ Other human or safety concern from the VI pathway (i.e. elemental mercury, unsaturated contamination, elevated soil gas or indoor vapor (explain):

If you answered "No," or awaiting laboratory data to Question 1., and did not check any boxes in Question 2, proceed to Section F, "Ecological Receptors", otherwise complete the rest of this section.

3. Has ground water contamination been delineated to the applicable Ground Water Vapor Screening Level? ☐ Yes ☒ No
4. Was a site specific screening level, modeling or other alternative approach employed for the VI pathway? ☐ Yes ☒ No
5. Identify and locate on a scaled map any buildings/sensitive populations that exist within the following distances from ground water contamination with concentrations above the Vapor Intrusion Ground Water Screening Levels or specific threats (check all that apply):
- ☐ 30 feet of petroleum free product or dissolved petroleum hydrocarbon contamination in ground water
 - ☒ 100 feet of any non-petroleum free product or any non-petroleum dissolved volatile organic ground water contamination
 - ☐ No buildings exist within the specified distances
6. The vapor intrusion pathway is a concern at or adjacent to the site (if "No," attach justification) ☐ Yes ☒ No

7. Has soil gas sampling of the building(s) been conducted? ☒ Yes ☐ No ☐ N/A
If "No," or "N/A," proceed to #12
8. Has indoor air sampling been conducted at the identified building(s)? ☒ Yes ☐ No
If "No," proceed to #12
9. Has indoor air contamination been identified but not suspected to be from the site?
(if "Yes," attach justification) ☐ Yes ☒ No
10. Indoor air results were above the NJDEP's Rapid Action Levels. ☐ Yes ☒ No
Provide the date that the laboratory data was available. Date: 11/10/2010
Or ☐ Awaiting laboratory data with the expected due date: _____
If "Yes" to #10 above, follow the IEC Guidance Document at
<http://www.nj.gov/dep/srp/guidance/index.html#iec> **for required actions.**
The IEC engineering system response for control was implemented for all
identified structures ☐ Yes ☐ No
Date: _____ NJDEP Case Manager: _____
11. Indoor air sampling was conducted and results were above the NJDEP's Indoor Air Screening
Levels but at or below the Rapid Action Levels. ☐ Yes ☒ No
Provide the date that the laboratory data was available. Date: 11/10/2010
Or ☐ Awaiting laboratory data with the expected due date: _____
If "Yes" to #11 above, answer the following:
Has the Vapor Concern (VC) Response Action Form notifying the NJDEP of the exceedances
been submitted? ☐ Yes ☒ No
Date: _____
Has a plan to mitigate and monitor the exposure been submitted? ☐ Yes ☒ No
Date: _____
Has the Mitigation Response Action Report been submitted? ☐ Yes ☒ No
Date: _____
12. Has the vapor intrusion investigation been completed? ☒ Yes ☐ No
If "No," is the vapor intrusion investigation stepping out as part of the site
investigation or remedial investigation. (If "No," attach justification) ☐ Yes ☐ No

SECTION F. ECOLOGICAL RECEPTORS

1. Has an Ecological Evaluation (EE) has been conducted? [N.J.A.C. 7:26E-1.16] ☒ Yes ☐ No
Date conducted: 10/14/2015
2. Do the results of an EE trigger a remedial investigation of ecological receptors? [N.J.A.C. 7:26E-4.8] ☒ Yes ☐ No
3. Has a remedial investigation of ecological receptors been conducted? ☐ Yes ☒ No
Date conducted: _____
4. Provide the following information for any surface water body on or within 200 feet of the site:

Surface Water Body Name	Stream Classification	Antidegradation Designation	Trout Production	Trout Maintenance
Arthur Kill Ship Channel	FW2-NT	C2	<input type="checkbox"/>	<input type="checkbox"/>
Smith Creek	FW2-NT	C2	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>

5. Does the site contain any features regulated by the Land Use Regulation Program (LURP)?
(e.g. wetlands, flood hazard area, tidelands, etc.). ☒ Yes ☐ No
If "Yes," identify the type(s) of features: Zone AE Flood Hazard Zone, Freshwater Emergent & Estuarine Wetlands
6. Have any formal LURP jurisdiction letters or approvals been issued for the site? ☐ Yes ☒ No
If "Yes," what is the LURP Program Interest (PI) number(s) for the site? _____
7. Have any applications for formal LURP jurisdiction letters or approvals been submitted the NJDEP?..... ☐ Yes ☒ No
If "Yes," what is the LURP Program Interest (PI) number(s) for the site? _____
8. Is free product or residual product located within 100 feet from an ecological receptor? ☐ Yes ☒ No
9. Does available data indicate an impact on Ecological receptor(s), Surface water, or Sediment?..... ☐ Yes ☐ No
If "Yes," Unknown at this time.
- a) Check all that apply:
☐ Ecological receptor(s) ☐ Surface water ☐ Sediment
- b) Submit with this evaluation either a technical document that includes contaminant summary information, or a description of the type of contamination, a schedule, and a description of all actions to be taken to mitigate exposure.

Completed forms should be sent to the municipal clerk, designate health department, and:

Bureau of Case Assignment & Initial Notice
Site Remediation Program
NJ Department of Environmental Protection
401-05H
PO Box 420
Trenton, NJ 08625-0420

RECEPTOR EVALUATION – ADDITIONAL INFORMATION
HESS CORPORATION FORMER PORT READING COMPLEX (HC-PR)
750 CLIFF ROAD
PORT READING (WOODBIDGE TWP), MIDDLESEX COUNTY, NEW JERSEY

SECTION B – ON SITE and SURROUNDING PROPERTY USE

Land use within 200 feet of the property boundary includes residential properties. However, the closest residence is over 800 feet from known petroleum impacts. In addition, all residences are upgradient of known petroleum impacts. Several monitoring wells are located between the known impacts and residential properties. These monitoring wells are sampled annually and there have been no contaminants detected above their respective NJDEP Groundwater Quality Standards (GWQS).

SECTION E – VAPOR INTRUSION (VI)

An indoor air investigation was conducted at the Hess Corporation Port Reading Administration Building on November 10, 2010. All analytical results were below the NJDEP Indoor Air Screening Levels. A Vapor Intrusion (VI) Sampling Form and Spreadsheet, Full Laboratory Deliverables Form and associated laboratory data, and the Electronic Disk Deliverables (EDDs) Conversion Tables were submitted to the NJDEP and USEPA on February 28, 2011.

SECTION F – ECOLOGICAL RECEPTORS

An Ecological Evaluation (EE) has been completed for the HC-PR property and is attached to this Receptor Evaluation. The EE documents the following:

- Environmentally Sensitive Natural Resources (ESNRs) are present on or adjacent to the site or are in locations receiving discharges from the site; and
- A preliminary identification that the site contains contaminants above Ecological Screening Criteria (ESCs); and
- An initial assessment of possible contamination migration pathways.

Since each of these conditions have been satisfied, an Ecological Risk Assessment (ERA) will be required pursuant to N.J.A.C. 7:26E-4.8. The ERA will be conducted as part of the Remedial Investigation at the site and will determine whether actual or potential ecological risks exist, identify those constituents that pose the adverse ecological risks, and generate data for risk-based remediation goal determinations and for any Risk Management Decisions (RMDs).